

CLAIMS

What is claimed is:

Fig. 1 A method of controlling packet data from multiple types of data sources, including data sources having reroutable data and data sources having non-reroutable data, the multiple types of data sources flowing into a multiuser channel in a wireless spread spectrum code division multiple access communication system, the method comprising:

Fig. 2 providing a queue for incoming data of each data source;
 tracking a backlog of data in the queue;
 limiting data flow from each of the data sources based on in part the tracked backlog;
 for each data source capable of rerouting packet data, selectively rerouting packet data intended to be transmitted over the multiuser channel to another channel based on in part the tracked backlog; and
 for each data source not capable of rerouting packet data, selectively not sending packet data intended to be transmitted over the multiuser channel based on in part the tracked backlog.

2. The method of claim 1 wherein the queue is a single queue associated with the multiuser channel.

3. The method of claim 1 wherein the queue comprises a plurality of queues, the

plurality of queues comprising a queue per each data source and a queue for the multiuser channel.

4. The method of claim 3 wherein the data flow limiting is by changing a size of each data source queue in response to the tracked backlog.

5. The method of claim 4 wherein the size of each data source queue decreases as the tracked backlog increases and increases as the tracked backlog decreases.

6. The method of claim 1 wherein the multiuser channel is a shared channel.

7. The method of claim 1 wherein the multiuser channel is a common channel.

8. The method of claim 7 wherein the common channel is a forward access control channel.

9. A wireless spread spectrum communication system having a radio network controller controlling the communication of a plurality of communication nodes where each node supports communications for a plurality of user equipments, the system comprising:
the plurality of communication nodes;

the plurality of user equipments having:

means for receiving packet data transferred over a multiuser channel; and

the radio network controller having:

a queue for incoming data from each data source;

means for tracking a backlog of packet data in the queue;

means for limiting data flow from each of the data sources based on in part the tracked backlog;

for each data source capable of rerouting packet data, means for selectively rerouting packet data intended to be transmitted over the multiuser channel to another channel based on in part the tracked backlog; and

for each data source not capable of rerouting packet data, means for selectively not sending packet data intended to be transmitted over the multiuser channel based on in part the tracked backlog.

10. The system of claim 9 wherein the queue is a single queue associated with the multiuser channel.

11. The system of claim 9 wherein the queue comprises a plurality of queues, the plurality of queues comprising a queue per each data source and a queue for the multiuser channel.

13. The system of claim 12 wherein the size of each data source queue decreases as the tracked backlog increases and increases as the tracked backlog decreases.